

ABSTRACT

An object of the present invention is to provide a catalyst which, in the FT process, exhibits a high chain growth probability, and a high catalytic activity, can stably and smoothly promote the reaction, exhibits a high productivity of C_5+ , and can efficiently produce liquid hydrocarbons, and a process therefor.

The invention relates to a hydrocarbon-producing catalyst obtainable by supporting a ruthenium compound on a support composed of a manganese oxide and an aluminum oxide, and which satisfies at least one of characteristics (1) and (2): (1) the catalyst being treated with an aqueous alkaline solution and subsequently subjected to calcination treatment in the air at 150 to 500°C, (2) the aluminum oxide being an aluminum oxide wherein pore volume formed by pores having a pore diameter of 8 nm or more accounts for 50% or more of total pore volume.